

## CLOSEOUT MEMORANDUM FOR M96090032

In September 1996, OIG received an allegation that an engineer<sup>1</sup> for a small company<sup>2</sup> had plagiarized material into his NSF SBIR proposal. OIG began an investigation, in which it concluded the subject had committed plagiarism. OIG's investigation report<sup>3</sup> and the NSF Deputy Director's 28 February 2001 letter describing his determination constitute the closeout for this case.

cc: Integrity, IG

---

<sup>1</sup> The engineer is Dr. {redacted}.

<sup>2</sup> The company is {redacted}.

<sup>3</sup> The OIG Investigation Report OIG Case M9690032 is dated 7 June 2000.

NATIONAL SCIENCE FOUNDATION  
4201 WILSON BOULEVARD  
ARLINGTON, VIRGINIA 22230



OFFICE OF THE  
DEPUTY DIRECTOR

February 28, 2001

CERTIFIED MAIL --RETURN RECEIPT REQUESTED

Dr. [REDACTED]  
[REDACTED]  
[REDACTED] CA [REDACTED]

Re: Notice of Misconduct in Science Determination

Dear Dr. [REDACTED]:

The National Science Foundation (NSF) has concluded that you committed misconduct in science when you engaged in plagiarism in two proposals that you submitted to NSF's Small Business Innovative Research Program (SBIR) in 1996.

Under NSF's regulations, "misconduct" is defined to include "plagiarism, or other serious deviation from accepted practices in proposing, carrying out or reporting results from activities funded by NSF." 45 CFR §689.1(a). The NSF's Office of Inspector General's Report establishes that you copied a flow chart and associated text from a published article by [REDACTED] and [REDACTED] Vol. [REDACTED], No. [REDACTED], pp. [REDACTED] (1992), without attribution and without the author's permission. The flow chart and associated text described the advantages associated with combining the partial least squares algorithm with the [REDACTED] model ("the [REDACTED] model").

By submitting proposals to NSF that copy the work of others without attribution, you misrepresented that the [REDACTED] model was first developed by your company, [REDACTED], rather than the original authors. This affected the integrity of the proposal. In addition, the record shows that you did not provide adequate attribution to the same authors' published work in three other SBIR proposals submitted to various Federal agencies.

I have determined that your copying of this reference in two NSF proposals without providing any attribution to the original authors' published work constitutes plagiarism and a serious deviation from accepted practices under NSF's regulations. See 45 CFR §689.1(a). I also conclude that you acted recklessly when you failed to cite to this fundamental reference in two separate proposals for NSF funding.

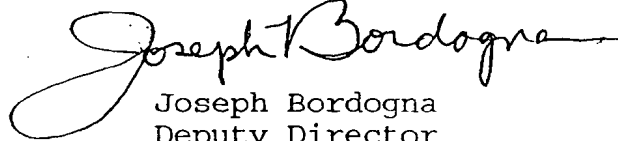
Nevertheless, there are a number of mitigating factors which I have also considered in determining the appropriate agency response to your misconduct. First, you have been candid in your

responses to OIG's investigation and have assumed full responsibility for your actions. Second, you have corrected your behavior and provided appropriate citations to the source document in subsequent submissions. Third, at the time the plagiarism occurred, you were a relatively inexperienced researcher. Fourth, you have indicated that you have not submitted any proposals for Federal funding since 1997.

In light of these mitigating factors, I conclude that issuance of this letter of reprimand is the appropriate action and that no additional actions are necessary to protect the Federal Government. However, I would like to emphasize that failure to provide appropriate attribution to another author's work in an NSF proposal severely undercuts the ability of NSF staff and reviewers to evaluate the PI's expertise and familiarity with the field. It is extremely important not to mislead reviewers into believing that someone else's work is your own. I am pleased that you provided proper attribution to source documents in subsequent submittals and hope that this error in judgment will be an anomaly in your career. This finding of misconduct in science does not preclude you from applying for NSF funding in the future or serving as a merit reviewer.

Under NSF's regulations, you have 30 days after receipt of this letter to submit an appeal of this decision, in writing, to the Director of the Foundation. 45 CFR §689.9(a). Any appeal should be addressed to the Director at the National Science Foundation, 4201 Wilson Boulevard, Arlington, Virginia 22230. For your information we are attaching a copy of the applicable regulations. If you have any questions about the foregoing, please call Lawrence Rudolph, General Counsel, at (703) 292-8060.

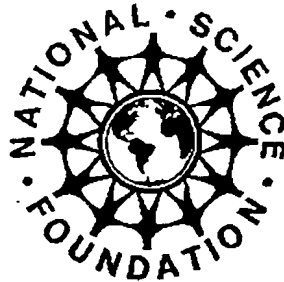
Sincerely,

A handwritten signature in dark ink, appearing to read "Joseph V. Bordogna", with a stylized flourish at the end.

Joseph Bordogna  
Deputy Director

Enclosures (2)  
Investigative Report  
NSF's misconduct in science regulations

# Confidential



## Office of Inspector General

### *Investigation Report*

OIG Case M96090032

7 JUNE 2000

---

This document is loaned to you FOR OFFICIAL USE ONLY. It remains the property of the Office of Inspector General. It may not be reproduced. It may be disclosed outside of NSF only by the Inspector General, pursuant to the Freedom of Information and Privacy Acts, 5 U.S.C. §§ 552, 552a.

---

# REPORT OF INVESTIGATION INTO ALLEGATIONS OF MISCONDUCT IN SCIENCE

## SUMMARY

The Office of Inspector General (OIG) has concluded that the subject<sup>1</sup> plagiarized a computational model, supporting text, and a figure from the authors' published paper<sup>2</sup> into two Small Business and Innovation Research (SBIR) Phase I proposals submitted to the National Science Foundation (NSF). The subject also submitted three other proposals using the model, text, and figure in support of different research objectives to three other federal agencies.<sup>3</sup> Each proposal applies the authors' model and uses supporting text and a figure from their paper. We concluded the subject exhibited a pattern of intellectual theft and verbatim plagiarism, and that he was solely responsible for it.

We recommend that NSF find that the subject committed misconduct in science and take the following actions as a final disposition in this case.

1. Send the subject a letter of reprimand from the NSF Deputy Director informing him that he committed misconduct in science.
2. For 3 years after the final disposition of this case, when proposals are submitted by the subject or on his behalf to NSF, require the subject to submit certifications to OIG that, to the best of his knowledge, they contain nothing that violates NSF's Misconduct in Science and Engineering regulation (45 C.F.R. part 689).
3. For the same period, require the subject to ensure that his immediate supervisor submit assurances to OIG that, to the best of that person's knowledge, the submitted proposals do not contain any plagiarized materials and all source documents are properly cited.<sup>4</sup>

## OIG'S INQUIRY

OIG received allegations that an NSF proposal (Proposal D) submitted by the subject contained a model, text, and a figure plagiarized from the paper.<sup>5</sup> Our comparison of Proposal D with the paper found a section of the proposal that directly relied on the authors' model.<sup>6,7</sup> This

---

<sup>1</sup> Dr. [REDACTED] former research scientist, [REDACTED] California.

<sup>2</sup> [REDACTED] and [REDACTED], [REDACTED], Vol. [REDACTED], No. [REDACTED], pp. [REDACTED] (1992); hereinafter "the paper."

<sup>3</sup> See Table 1 in Appendix 8 for a list of proposals.

<sup>4</sup> The subject's certifications and his supervisor's assurances should be sent to NSF's Office of Inspector General, for retention in the Office's confidential file on this matter.

<sup>5</sup> See Appendix 1 for the paper and Appendix 8 for a list of proposals that the subject submitted to NSF.

<sup>6</sup> The concept of the [REDACTED] model (hereinafter "the model") is represented in figure 2 of the paper. According to the second author, the model was developed by the first author as part of his dissertation research and was a new development.

<sup>7</sup> A [REDACTED] is a computational model designed to mimic problem-solving patterns in [REDACTED]. These models have the ability to "learn" from their mistakes and are useful in solving problems where the data are thought to be correlated and/or noisy. The authors' model is a union of an existing numerical method, the PLS (partial least squares as illustrated in fig. 1 of the paper), with [REDACTED]. They call it, [REDACTED] as illustrated in fig. 2 of the paper). By embedding [REDACTED] into the framework of the PLS modeling method, the authors' [REDACTED] model incorporates the robustness of the PLS with the flexibility of [REDACTED]. It is this key idea, the

section contains one figure that appears to have been copied, with slight modification, from the paper and small amounts of verbatim and paraphrased text. The proposal section describes the authors' model and relies on it to promote his research. It does not reference the paper nor attribute the model, text, or figure to the authors.

With regard to proposal D, an NSF Program Officer<sup>8</sup> stated:

It is highly unlikely that a company working specifically in [this area] would be unaware of [the authors'] work, and yet 'accidentally' reinvent the whole thing, by the same name. There is no citation of [the authors'] prior work.<sup>9</sup>

With respect to the figure, he said:

The flowchart on page 12 [is] identical to [the authors'], except for an input and output box which were implicit and obvious . . . [and] a certain aspect of the flowchart . . . APPEARS incongruous and unexplained in [the subject's] proposal, but was developed by [the authors' group] because of a need, which arose in [the authors'] application.<sup>10</sup>

We included copies of Proposal D and the paper in which we bracketed the section describing the model, highlighted the copied and paraphrased text that discusses the essence of the model, and boxed the figure common to both documents.

#### Subject's Response to OIG's Inquiry

In the subject's written response<sup>11</sup> to our letter,<sup>12</sup> he said he was "aware of the [authors'] work . . . [but] the reference to their paper was accidentally deleted by mistake and carelessness."<sup>13</sup> He said, "I did not use the idea [of the authors] for the proposal."<sup>14</sup> He offered the explanation that the proposal was "on a new . . . architecture . . . not on particular [REDACTED] models."<sup>15</sup> As part of his work he "wanted to apply and test [the authors'] model."<sup>16</sup> The subject said: "It was my own decision to write and submit the proposal on this research. Of course, it was approved by my supervisor, and then by the company."<sup>17</sup> He said the mistake occurred:

during final editing [when] the reference mark (seed) in the text was mistakenly deleted causing the deletion of the whole reference (in Microsoft Word). That we

particular union of PLS and [REDACTED] that utilizes their strengths, that the subject allegedly misappropriated into his proposals. The subject generally refers to this model as [REDACTED]. However, he also described it as a particular form of a [REDACTED].

<sup>8</sup> The Program Officer is within the Division of [REDACTED] in the Directorate for Engineering.

<sup>9</sup> Appendix 3.

<sup>10</sup> *Id.*

<sup>11</sup> Appendix 4.

<sup>12</sup> Appendix 5.

<sup>13</sup> Appendix 4 at 1.

<sup>14</sup> *Id.*

<sup>15</sup> *Id.*

<sup>16</sup> *Id.*

<sup>17</sup> *Id.* at 2.

did not mark the model as proprietary indicates that the mistake was not intentional (we did mark the architecture as proprietary). I used their symbols and acronym because I meant to cite their paper. I adjusted their figure 2 because I thought it is a little too complex. I do apologize for some improper wordings in the proposal text.<sup>18,19</sup>

### Conclusion of OIG's Inquiry

The subject's explanation that the missing reference was a "careless mistake" did not satisfactorily address the allegations of intellectual theft and verbatim plagiarism. He failed both to include a citation in his reference list and to include numerous appropriate citations within the proposal body to attribute the model and indicate the copied text and figure. Although he modified the figure, he retained its essential, unique feature—the combination of [REDACTED] and [REDACTED] into the [REDACTED] model. His assertion that the action of marking text as proprietary indicated that his citation omissions were unintentional is not credible. The two issues are unrelated. We concluded there was sufficient substance to these allegations to warrant an investigation.

NSF primarily relies on awardee institutions to prevent and detect misconduct.<sup>20</sup> It is OIG's policy and practice to delay its investigations and to defer investigations to awardees whenever practicable. In this particular instance, we believe that the institution, a small company,<sup>21</sup> served as an important resource to our investigation, but had an inherent conflict of interests because of its small size. We did not believe they could conduct an objective investigation because of the close relationships of the PI with other company employees and officers, therefore, we did not defer the investigation and began our own.

### OIG'S INVESTIGATION

#### Company Contact

We contacted the company to request their views on the allegations.<sup>22</sup> The company president indicated that the subject was responsible for the final content of the proposal including the accuracy of the citations and references.<sup>23</sup> The company's Proposal Route Slip form shows that the subject conducted a final author review that included verifying the references.<sup>24</sup>

Specifically, the company president said that the company's policies and practices related to proposal preparation require that "original authors [are cited] whenever [PI's] use outside ideas in

---

<sup>18</sup> We note the subject renamed and merged the authors' "x" and "y" input streams into a single "data set" stream and he redrew the authors' arrow designating the output as a "residual" data box. One of the authors explained that PLS requires separate input streams and that by merging "x" and "y", and eliminating the separate analysis of the residual "u" and "t" components, the subject made the model unworkable.

<sup>19</sup> Appendix 4 at 1.

<sup>20</sup> 45 C.F.R. § 689.3(a).

<sup>21</sup> See footnote 1.

<sup>22</sup> Appendix 6.

<sup>23</sup> Appendix 7.

<sup>24</sup> Appendix 7, attachment A at 2.

their proposals,”<sup>25</sup> and its review process supports that policy. She addressed the subject’s claim that the citation was a “careless mistake” during the final editing, saying:

[I]nitial proposal texts written by PIs are often too long to fit the SBIR page limitations. It is therefore possible that some cuts were necessary in [the subject’s] proposal, which removed the reference to the paper . . . . However, this would have to be done by [the subject] himself prior to the submission of his proposal to the Publication Center. This is because the feature for automatic deletion process in Microsoft Word described by [the subject] (in his letter to [OIG]) is not used at [the company’s] Publication Center. Once the texts from PIs disks are copied to the Publication Center’s Computers, only paper versions are delivered for edits or corrections. All edits were made by hand so that PIs could clearly see all corrections.<sup>26</sup>

She said “it was [the subject’s] responsibility as a PI to approve the final text of [Proposal D] and also to make sure that all references were correctly placed in the proposal”<sup>27</sup> and that he “should have included the reference to [the paper] in his proposal.”<sup>28</sup> She believed the subject’s actions were more serious than “this [one] proposal indicat[ed] because [the company] found . . . four other proposals written by him as a PI contain a figure identical to Figure 4.3 in [Proposal D].”<sup>29</sup>

Table 1<sup>30</sup> identifies the section in each of the subject’s federal proposals that describe the authors’ model, contain the copied or paraphrased text and figure, and apply the authors’ model. It also describes the references and citations he included in each proposal and indicates whether the authors’ information was claimed as proprietary to the company.

For example, in Proposal D, the subject states: “[T]he [redacted] partial least squares [redacted] model, is currently being developed and tested at [redacted].”<sup>31</sup> He addresses the design of the algorithm and [redacted] in text immediately preceding the bracketed section in which he applies the authors’ model, supported by their text and figure, as the basis for his research objective of training [redacted] models.<sup>32</sup>

A separate act of unattributed use of the authors’ model, text, and figure is evident in Proposal E. The abstract states that this “project addresses the problem of on-line machine tool wear monitoring . . . by developing a novel fast-training [redacted] [redacted] . . . consist[ing] of a partial least squares (PLS) linear transformation and a multi-layer feedforward [redacted]. The optimum combination of the PLS module and relatively smaller nonlinear learning (backpropagation) [redacted] makes the [redacted] very efficient. . . .”<sup>33</sup> In the bracketed section, the subject applies the authors’ model, supporting text, and the figure to his research

---

<sup>25</sup> Appendix 7 at 3.

<sup>26</sup> *Id.* at 2.

<sup>27</sup> *Id.*

<sup>28</sup> *Id.* at 4.

<sup>29</sup> *Id.*

<sup>30</sup> Appendix 8.

<sup>31</sup> Appendix 2 at 11.

<sup>32</sup> *Id.* at 10-12.

<sup>33</sup> Appendix 9 at 2 (emphasis added).

objective of using [REDACTED] to monitor tool wear.<sup>34</sup> Unlike Proposal D, the subject marked this information as proprietary. The key concept of the [REDACTED] model, taken from the paper, is illustrated by a sentence in Proposal D and Proposal E that reads: "The [REDACTED] model incorporates the [REDACTED] concept into the PLS algorithm (Figure 4)."<sup>35</sup>

The research objectives in Proposals A, B, C, D, and E<sup>36</sup> are unique, but all incorporate the authors' model, text, and figure as support for the subject's research goals. Proposals A, B, C, D, and E apply [REDACTED] to specific problems in auto-tuning, tool wear monitoring, CAT imagery analysis, surveillance and arms control treaty verification, and cytological diagnosis of cancer, respectively.

### OIG'S CONCLUSION REGARDING MISCONDUCT IN SCIENCE

NSF defines misconduct in science in relevant part as "[f]abrication, falsification, plagiarism, or other serious deviation from accepted practices in proposing, carrying out, or reporting results from activities funded by NSF." (45 C.F.R. § 689.1(a)(1)). For NSF to make a finding of misconduct in science, a preponderance of the evidence must support the conclusions that the subject both committed a bad act and did so with a level of culpable intent that justifies taking action against the subject (e.g., willful, knowing, or gross negligence). (45 C.F.R. § 689.2(b)).

Our evaluation focuses on the alleged intellectual theft and verbatim plagiarism in Proposals D and E because they were submitted to NSF.

#### The Act – Intellectual Theft and Verbatim Plagiarism

Intellectual Theft – Intellectual theft is understood to be the use of an idea or concept from another without attribution. The subject used the authors' model in two NSF proposals to support different research projects. Neither Proposal D nor E contains a reference to the authors' paper, and their model is not attributed to them. Without such attribution, the subject, as the sole author of these proposals, represented the authors' unique model as his own in two different NSF proposals.

We believe the preponderance of the evidence supports the conclusion that the subject used the authors' model without attribution to support the research objectives in Proposals D and E.

Verbatim Plagiarism: – When a proposal author copies material he must mark it off from other text in his proposal so that it is distinguishable by font, indentation, quotation marks or other means from the material he authored. Providing a citation is essential. A citation is sufficient if the proposal author uses the ideas of another but describes them in his own words. In this case, the subject copied the authors' words and a figure without attribution.

In each NSF proposal, the subject signed the following certification on page 2 of the NSF cover page:

---

<sup>34</sup> *Id.* at 10-12.

<sup>35</sup> Appendix 2 at 12 and Appendix 9 at 11.

<sup>36</sup> Appendix 8.

I certify to the best of my knowledge that . . . the text and graphics herein as well as any accompanying publications or other documents, unless otherwise indicated, are the original work of the signatories or individuals working under their supervision. . . .

I understand that the willful provision of false information or concealing a material fact in this proposal or any other communication submitted to NSF is a criminal offense (U.S. Code, Title 18, Section 1001).<sup>37</sup>

By signing this certification the subject claimed the unattributed work as his own. Based on a preponderance of evidence, we concluded that the subject copied text and a figure without proper attribution into two NSF proposals.

### State of Mind

We do not find credible the subject's explanation that the omission of the citations and reference was a "careless mistake and by no means intentional."<sup>38</sup> The idea for the model should have been acknowledged and the copied text and figure should have been cited and set off from the surrounding text by quotation marks, indentation or font. Neither of the two exceptions, where the words themselves have become part of standard usage or where there is only one way to express a concept, apply. The subject could not have copied the text and the figure into either proposal without knowing that he was doing so. The material he used was essential to his proposed research. Each time the subject used the authors' idea for the model, he thought about how to apply their model to a new research area. He claimed that designating some material in Proposal D as proprietary showed that his citation and reference omissions were unintentional. There is no link between his rationale for failing to credit the authors and the proprietary nature of the company's efforts. Designating material as proprietary does not relieve the author of obligations to attribute copied material and ideas to their original sources.

The subject suggested that citation and reference omissions were "careless mistakes" made during final editing.<sup>39</sup> However, we found that the company appears to have reasonable safeguards to prevent such mistakes within its proposal review process. The president stated that "[n]o proposal at [the company] is ever submitted without the approval of the final text by the PI"<sup>40</sup> and that it was ultimately "his responsibility as a PI to approve the final text of [Proposal D] and also to make sure that all the references were correctly placed in the proposal."<sup>41</sup> We agree. As demonstrated by the separate certifications NSF requires of an institutional official and a PI, NSF holds institutional officials responsible for the administration of an award and separately holds a PI responsible for the proposal's content.

We do not believe that the subject's omission of the citations and references were careless mistakes in the final editing stages. The subject submitted five proposals over a six-month period. Chronologically, the first proposal<sup>42</sup> failed to list the paper in the reference list or cite the paper for

---

<sup>37</sup> Appendix 2 at 2 and Appendix 9 at 2.

<sup>38</sup> Appendix 4 at 1.

<sup>39</sup> *Id.*

<sup>40</sup> Appendix 7 at 2 (emphasis in original text).

<sup>41</sup> *Id.*

<sup>42</sup> Appendix 10.

the author's text and figure used in the proposal. The second proposal listed the paper as a reference<sup>43</sup> but did not cite the text or figure in the proposal.

The third proposal included a reference, as well as a single sentence within the proposal, that attributes the model to the authors (it is preceded by a general sentence attributing various models to their authors).<sup>44</sup> It did not contain citations for the text or figure. This sentence: "Two new and powerful feature-extraction [redacted] models, the [redacted] partial least squares [redacted] model<sup>[26]</sup> and the combined partial least squares (PLS) and [redacted] model, are currently being developed at [the company]."<sup>45</sup> This sentence and the general one preceding it clearly indicate the subject's knowledge that the [redacted] model was not his idea.

Neither the fourth<sup>46</sup> nor the fifth<sup>47</sup> (the NSF) proposals include the paper as a reference or contain citations for the text or figure. The sentence mentioned above was modified to read, "A new and powerful feature-extraction [redacted] model, the [redacted] partial least squares [redacted] model, is currently being developed and tested at [the company]."<sup>48</sup> A simple deletion error in the final editing stages by a mechanism the company states was not in use would neither account for the revision of the sentence to discuss only one model nor the missing citations. Even if this were plausible, such a mistake would not explain the subject's consistent failure to attribute the copied text or figure. Our examination of the subject's reference and citation practices for all five proposals show the subject's consistently ignored his responsibility to accurately reference and cite the work of others.<sup>49</sup> It belies his explanation of a simple deletion error in the final editing stages.

All of the proposals utilize the authors' model but vary in its application. It is hard to conceive of a situation where an essential reference, as well as numerous citations within the text and figure, could be careless omissions. After we contacted him, the subject submitted a proposal using the authors' model, text, and figure that lists the paper as a reference and contains citations to that reference in the proposal text.<sup>50</sup> This proposal and his marginal citation efforts in proposals submitted prior to the NSF proposals demonstrate that the subject knew he should correctly reference and cite to the authors' work but chose not to do so. Based on a preponderance of evidence, we conclude that the subject acted knowingly when he copied the model, text, and the figure from the paper into two different NSF proposals.

---

<sup>43</sup> Appendix 11 at 22.

<sup>44</sup> Appendix 12. We have previously noted that this sentence is on page 19 of the proposal and the text and figure are on pages 20-21.

<sup>45</sup> *Id.* at 19.

<sup>46</sup> Appendix 2.

<sup>47</sup> Appendix 9.

<sup>48</sup> Appendix 2 at 11 and Appendix 9 at 10.

<sup>49</sup> Table 1 in Appendix 8.

<sup>50</sup> Appendix 13. The proposal contains a reference and three citations to the paper within its text. The figure is separately cited to the reference.

## OIG's Conclusion about the Intellectual Theft and Verbatim Plagiarism

Plagiarism is to "steal and use (the ideas or writings of another) as one's own"<sup>51</sup> without offset or proper attribution. We conclude that the subject committed plagiarism when he knowingly took the authors' model, text, and figure and represented them as his own. He did not reference or offset the text or the figure, or otherwise attribute the model to the original authors. The subject seriously deviated from the accepted practice, not only in the engineering community, but also in the wider scientific community. A preponderance of the evidence supports the conclusion that the subject committed misconduct in science, specifically intellectual theft and verbatim plagiarism.

## OIG's RECOMMENDED DISPOSITION

Under NSF's regulation, when deciding what actions are appropriate when misconduct is found, NSF officials should consider any evidence of a pattern, the seriousness of the misconduct, the intent with which the subject acted, and finally its relevance to other funding requests or awards involving the individual.<sup>52</sup>

### Evidence of a Pattern

The subject copied text and the figure into five different proposals and used the authors' model as the basis for proposals on different concepts submitted to four federal agencies. The five proposals were submitted over a six-month period and requested \$424,946. The subject's broader pattern of erratically including references yet omitting citations within his proposals is not consistent with the explanations he provided us. It is also not consistent with the company's review and approval system.

Each time the subject used the authors' material, he presented it in support of a new research project and ignored rules of proper attribution. A preponderance of evidence supports the conclusion that the subject exhibits a clear pattern of plagiarism.

### Seriousness

Representing the work of another as one's own without giving appropriate recognition to the original author is viewed as a serious act in the scientific community. Marcel LaFollette concluded, "[t]he concept of 'originality'—in the sense of 'newness' or novelty—lies behind the publishing and scientific communities' strong condemnation of all plagiarism."<sup>53</sup> Receiving credit for new ideas is the currency of academicians. Sigma Xi, the honor society for scientists, views the failure to provide acknowledgment as dishonest.

Appropriate recognition means what it says. We are not ordinarily required to acknowledge in print the services provided by our typists . . . but those whose careers and reputations depend, like our own, on intellectual qualities and scientific ability deserve recognition. Not to give it is dishonest.<sup>54</sup>

---

<sup>51</sup> *The American Heritage Dictionary of the English Language*, New College Edition, Houghton Mifflin Company, 1976.

<sup>52</sup> 45 C.F.R. § 689.2(b).

<sup>53</sup> *Stealing Into Print*, Marcel C. LaFollette, University of California Press, 1992, p. 52.

<sup>54</sup> *Honor in Science*, Sigma Xi, The Scientific Research Society, Incorporated, 1997, p. 16.

After discovering four additional proposals, the company's president characterized the subject's actions as "so fundamentally stupid that it is almost difficult to believe that a scientist with a Ph.D. could have done it."<sup>55</sup>

The subject's actions with regard to the NSF proposals are serious deviations from accepted practices that are made more serious by his pattern of intellectual theft and verbatim plagiarism.

#### Recommended NSF Action

Our recommended actions take into account the extent of the plagiarism by the subject and his level of experience. The subject now works for another small company<sup>56</sup> that can submit proposals to NSF. We recommend that NSF's Deputy Director take the following actions to protect the federal government's interests:

1. Send the subject a letter of reprimand informing him that he was found to have committed misconduct in science.<sup>57</sup>
2. For 3 years, when proposals are submitted by the subject or on his behalf to NSF, require him to submit certifications to OIG that, to the best of his knowledge, the proposals contain nothing that violates NSF's Misconduct in Science and Engineering regulation (45 C.F.R. Part 689).<sup>58</sup>
3. For the same period, require the subject to ensure that his immediate supervisor submit assurances to OIG that, to the best of that person's knowledge, the submitted proposals do not contain any plagiarized materials and all source documents are properly cited.<sup>59,60</sup>

Since the subject has requested funding from other federal agencies in the past, we recommend that NSF coordinate any certification and assurance actions with other federal agencies to ensure proper protection of federal interests. Alternatively, the subject should be debarred for a period of two years.<sup>61</sup> We believe that these actions will adequately protect NSF's interests.

#### SUBJECT'S RESPONSE TO THE DRAFT INVESTIGATION REPORT

We provided the subject a copy of the draft Investigation Report and requested that he provide us with any comments or rebuttal to our findings or recommended actions. In his 30 March response,<sup>62</sup> he asked that we consider four points. In points 1, 2, and 3, he states that his use of [REDACTED] [REDACTED] [REDACTED] was as a general term for [REDACTED] with particular characteristics and that these were considered general technologies used by the firm for which he worked. Our Report did not take issue with the subject's use of any particular [REDACTED]. Instead, our

---

<sup>55</sup> Appendix 7 at 4.

<sup>56</sup> [REDACTED] California.

<sup>57</sup> This is a Group I action (see 45 C.F.R. § 689.2(a)(1)(i)).

<sup>58</sup> This is a Group II action (see 45 CFR § 689.2(a)(2)(ii)).

<sup>59</sup> This is a Group II action (see 45 CFR § 689.2(a)(2)(ii)).

<sup>60</sup> The subject should send the certifications and his supervisor should send the assurances to NSF's Office of Inspector General, for retention in the Office's confidential file on this matter.

<sup>61</sup> This is a Group III action (see 45 C.F.R. § 689.2(a)(3)(ii)).

<sup>62</sup> Appendix 14.

Report was concerned with his failure to attribute the [REDACTED] model to its authors. We concluded his actions were plagiarism and hence misconduct in science. In points 3 and 4, the subject concedes that his use of the authors' work was "wrong and misleading."<sup>63</sup> We agree. Finally, he notes in point 4, that he correctly attributed the information in a proposal submitted after we had contacted him in our inquiry. We considered his corrections in developing our recommendations. The findings and recommendations in this Report remain unchanged from the draft provided to the subject.

---

<sup>63</sup> Appendix 14 at 2.